VDC-485 Series Dome Cameras FlexiDome XF

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Invented for life

▶ High impact, vandal-resistant, weatherproof housing

▶ NightSense for low light conditions

▶ 15-bit DSP technology

▶ XF-Dynamic for wide dynamic range

▶ 540 TVL color resolution

The FlexiDome^{XF} series are the ultimate solutions for virtually any indoor or outdoor surveillance application. These color dome cameras are high-performance, vandal-resistant units with NightSense. The cast-aluminum housing, polycarbonate dome, and hardened inner liner can withstand the equivalent of 55 kg (120 lbs) of force. The enclosure contains full-featured color cameras with 1/3-inch CCD and integral varifocal lenses. Ideal for outdoor use, the cameras are protected against water and dust to IP 66 (NEMA-4X) standards.

Installation is quick and easy, since the cameras come completely assembled and ready to use. Using the proprietary pan/tilt/rotation mechanism, installers can select the exact field of view. Mounting options are numerous, including surface, 4S (USA), wall, corner and suspended ceiling.

The FlexiDome^{XF} cameras are an ideal solution for many surveillance applications, even under the most challenging lighting conditions. Their compact, sleek design and virtually flush-mount appearance will complement any decor. The camera enclosure

provides the extra protection necessary for applications such as in schools, banks, prisons, parking garages, retail and industrial buildings.

Functions

Technology
The FlexiDome^{XF} series incorporate the latest technology adopted from the high-performance Dinion^{XF} Color cameras. This technology ensures the highest possible image quality at all times and under all conditions. Based on a unique combination of 15-bit digital video processing and XF-dynamic, these cameras provide excellent sensitivity, with up to 32x extended dynamic range. This delivers a sharper, more detailed image with outstanding accuracy in color reproduction.

Operation
All cameras feature video motion detection, auto black, default shutter and back light compensation for optimum performance in all lighting conditions. The lens wizard and focus aid make lens adjustment easy and straightforward, and ensure proper focus throughout the 24-hour cycle. All cameras incorporate

Bilinx, a technology that allows technicians to set up, control the camera settings, and even update firmware remotely over the video cable.

Controls and Indicators
- OSD
- 5-key operation

Interconnections
- Video connection BNC on flying lead
- Power connection on flying leads

Certifications and approvals

Safety	UL 1950; CSA 22.2 No. 950; EN 60950 (CE)
Immunity	EN 50130-4 (CE)
Emission	EN 50022 class B (CE); FCC, class B part 15
Water/dust protection	IP 66 and NEMA-4X

Region	Certification	
USA	FCC	Declaration of Conformity VDx 355-455-485-495
Europe	CE	

Installation/configuration notes
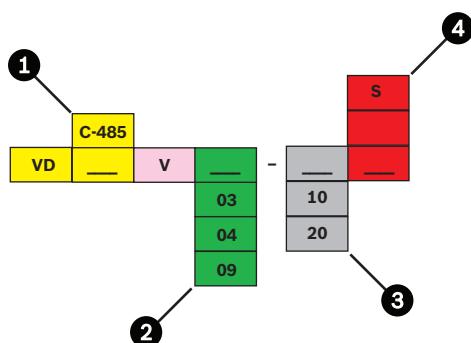
1		
	C-485	Color (with NightSense)
2	03	3 to 9.5 mm F1.0 (Color version)
	04	3.7 to 12 mm F1.6
	09	9 to 22 mm F1.4
3	10	PAL color or CCIR mono
	20	NTSC color or EIA mono
4		Flush mount
	S	Surface mount

FlexiDome^{XF} model overview

FlexiDome^XF model overview

| Model	Standard	Lens
VDC-485V03-10	PAL	3 to 9.5 mm F1.0
VDC-485V03-20	NTSC	3 to 9.5 mm F1.0
VDC-485V04-10	PAL	3.7 to 12 mm F1.6
VDC-485V04-20	NTSC	3.7 to 12 mm F1.6
VDC-485V09-10	PAL	9 to 22 mm F1.4
VDC-485V09-20	NTSC	9 to 22 mm F1.4

BNC to UTP Transceiver
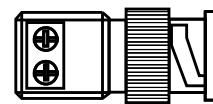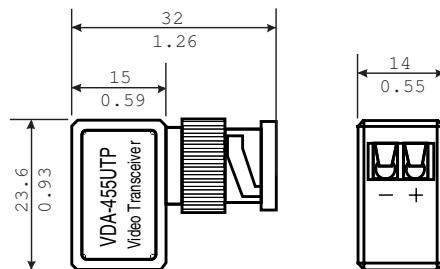
Dimensions in mm (in.)

Flush Mounting
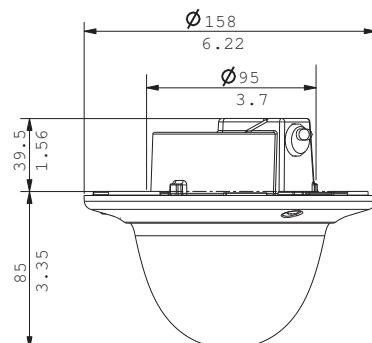

Dimensions in mm (in.)

VDA-455SMB–Surface Mount Box
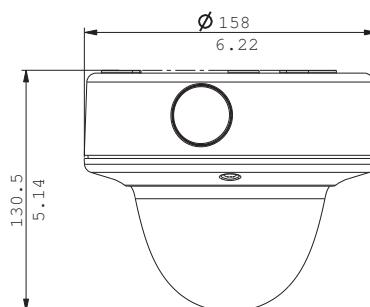
Dimensions in mm (in.) for surface mounting

VDA-WMT-DOME –Pendant Wall Mount

113 (4.43)
46 (1.81)
Ø4.8 (0.19)
83 (3.27)
113 (4.43)
247 (9.71)
Ø158 (6.23)

Ø133 (5.24)
mm (in)
205 (8.07)

VDA-PMT-DOME –Pendant Pipe Mount

88 (3.47)
88 (3.47)
Ø11 (0.43)
Ø158 (6.23)
656 (25.82)
mm (in)

VDA-CMT-DOME –Corner Mount

107 (4.19)
146 (5.75)
90 (3.54)
25 (0.98)
3-3/4"NPT
90°
81 (3.21)
180 (7.09)
mm (in)
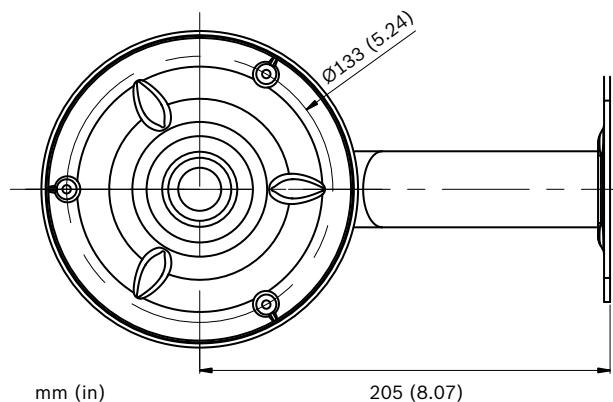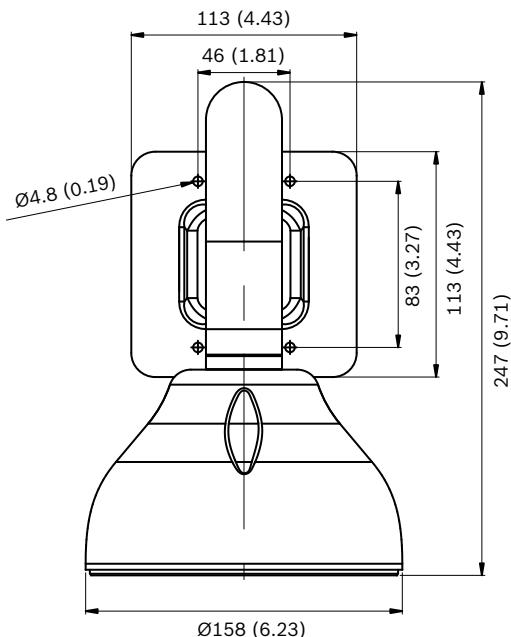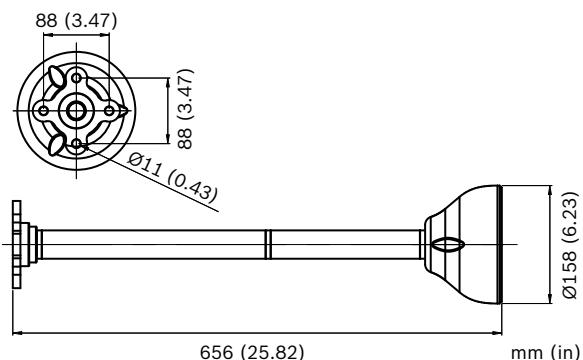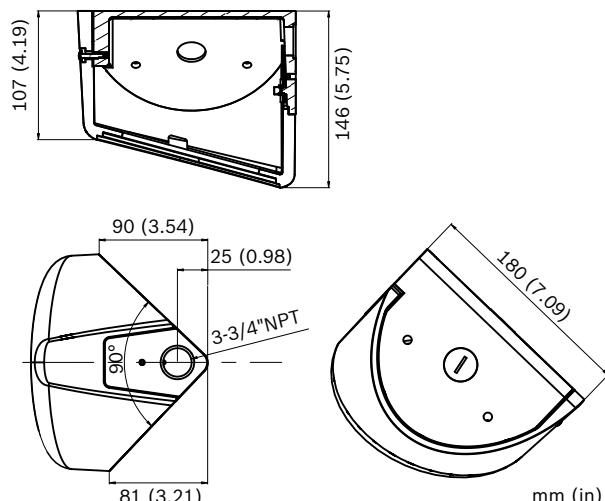
Technical specifications

Electrical

Power supply	
Rated voltage	12 VDC or 24 VAC, 50/60 Hz
Voltage range	10.8 to 39 VDC or 12 to 28 VAC, 45 to 65 Hz
Power consumption	4 W (6 W with heater operating)
Imager	Interline transfer CCD, 1/3-inch image format
Active picture elements	
PAL models	752 H x 582 V
NTSC models	768 H x 494 V

Sensitivity (3200 K)

Model		Usable picture	Usable picture	Full video
		(30 IRE)	(50 IRE)	(100 IRE)
Color				
VDC-485V03	Color	0.16 lx (0.015 fc)	0.35 lx (0.033 fc)	1.4 lx (0.13 fc)
	Color + 10 x SensUp	0.016 lx (0.0015 fc)	0.035 lx (0.0033)	0.14 lx (0.013 fc)
	NightSense	0.056 lx (0.0052 fc)	0.13 lx (0.012)	0.5 lx (0.046)
	NightSense + 10 x SensUp	0.0056 lx (0.00052fc)	0.013 lx (0.0012)	0.05 lx (0.0046)

VDC-485V04	Color	0.4 lx (0.037 fc)	0.9 (0.083)	3.6 (0.33)
	Color + 10 x SensUp	0.04 lx (0.0037 fc)	0.09 (0.0083)	0.36 (0.033)
	NightSense	0.14 lx (0.013 fc)	0.32 (0.03)	1.3 (0.12)
	NightSense + 10x SensUp	0.014 lx (0.0013 fc)	0.032 (0.003)	0.13 (0.012)
VDC-485V09	Color	0.28 lx (0.027 fc)	0.62 lx (0.058 fc)	2.48 lx (0.23 fc)
	Color + 10 x SensUp	0.028 lx (0.0027 fc)	0.062 lx (0.0058)	0.248 lx (0.023 fc)
	NightSense	0.099 lx (0.0092 fc)	0.23 lx (0.021)	0.88 lx (0.081)
	NightSense + 10 x SensUp	0.0099 lx (0.00092)	0.023 lx (0.0021)	0.088 lx (0.0081)

SensUp	Automatic continuous up to 10 x, off selectable
Horizontal resolution	540 TVL
Signal-to-noise ratio	>50 dB
AGC	Auto, maximum level selectable 28 dB
Auto black	On/off selectable
Electronic shutter	Flickerless, on/off, default shutter
NightSense (XF only)	Auto, forced, off selectable
Day/Night (DN only)	Auto, monochrome, color selectable
Dynamic range	32 x dynamic range enhancement
Dynamic noise reduction	Automatic, off, selectable
Sharpness correction	Horizontal and vertical, symmetrical
Backlight compensation	Off, programmable window and level selectable
White balance	Automatic sensing (2500 to 9000 K), AWB hold and manual
Video motion detector	Four (4) areas, sensitivity selectable
Camera ID	16-character editable string, position selectable
Video output	Composite video 1.0 Vpp, 75 ohm
Remote control	Bi-directional coaxial communication

Synchronization	Internal or LineLock*
Connector	Flying leads (through the back)

* LineLock (only when AC-powered) synchronizes the camera to the power line zero crossing for roll-free vertical interval switching. Vertical phase delay can be adjusted (from 0° to 358°) to allow vertical synchronization in multi-phase power installations.

Optical

Varifocal	Manual zoom and focus adjustment
Iris control	Automatic iris control
Viewing angle	
3 to 9.5 mm	Wide 95º x 69º (H x V)
	Tele 30.2º x 22.6º (H x V)
3.7 to 12 mm	Wide 76.1º x 55.8º (H x V)
	Tele 23.8º x 17.9º (H x V)
9 to 22 mm	Wide: 31.2º x 22.8º (H x V)
	Tele: 12.8º x 9.6º (H x V)

Mechanical

Dimensions	See drawings
Weight	740 g (1.63 lb)
Mounting	Flush on hollow surface with three (3) screws in a 4S electrical box
Color	White (RAL9010) trim ring with black inner liner
Adjustment range	360º pan, 90º tilt, ±90º azimuth
Dome bubble	Polycarbonate, clear with UV blocking anti-scratch coating
Trim ring	Aluminum

Environmental

Operating temperature	-50 ºC to +50 ºC (-58 ºF to +122 ºF) (with heater 'ON')
Storage temperature	-40 ºC to +70 ºC (-40 ºF to +158 ºF)
Humidity	5% to 93% relative humidity
Impact protection	IEC 60068-2-75 test Eh, 50 J
	EN 50102, exceeding IK 10

Ordering information

VDC-485V03-10 Vandal Resistant Color Model
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3-9.5 mm F1.0 Varifocal lens, white
Order number **VDC-485V03-10**

VDC-485V03-10S Vandal Resistant Color Model, Surface Mount
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3-9.5 mm F1.0 Varifocal lens, white, surface mount
Order number **VDC-485V03-10S**

VDC-485V03-20 Vandal Resistant Color Model
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3-9.5 mm F1.0 Varifocal lens, white
Order number **VDC-485V03-20**

VDC-485V03-20S Vandal Resistant Color Model, Surface Mount
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3-9.5 mm F1.0 Varifocal lens, white, surface mount
Order number **VDC-485V03-20S**

VDC-485V04-10 Vandal Resistant Color Model
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3.7-12 mm F1.4 Varifocal lens, white
Order number **VDC-485V04-10**

VDC-485V04-10S Vandal Resistant Color Model, Surface Mount
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3.7-12 mm F1.4 Varifocal lens, white, surface mount
Order number **VDC-485V04-10S**

VDC-485V04-20 Vandal Resistant Color Model
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3.7-12 mm F1.4 Varifocal lens, white
Order number **VDC-485V04-20**

VDC-485V04-20S Vandal Resistant Color Model, Surface Mount
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3.7-12 mm F1.4 Varifocal lens, white, surface mount
Order number **VDC-485V04-20S**

VDC-485V09-10 Vandal Resistant Color Model
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/9-22 mm F1.4 Varifocal lens, white
Order number **VDC-485V09-10**

VDC-485V09-20 Vandal Resistant Color Model
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/9-22 mm F1.4 Varifocal lens, white
Order number **VDC-485V09-20**

VDC-485V09-10S Vandal Resistant Color Model, Surface Mount
1/3-inch, PAL color, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/9-22 mm F1.4 Varifocal lens, white, surface mount.
Order number **VDC-485V09-10S**

VDC-485V09-20S Vandal Resistant Color Model, Surface Mount
1/3-inch, NTSC color, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/9-22 mm F1.4 Varifocal lens, white, surface mount.
Order number **VDC-485V09-20S**

VDN-495V03-10 Vandal Resistant Day/Night Model
1/3-inch, PAL D/N, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3-9 mm F1.4 Varifocal lens, white
Order number **VDN-495V03-10**

VDN-495V03-10S Vandal Resistant Day/Night Model, Surface Mount
1/3-inch, PAL D/N, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3-9 mm F1.4 Varifocal lens, white, surface mount
Order number **VDN-495V03-10S**

VDN-495V03-10SF Vandal Resistant Day/Night Model, Surface Mount, French
1/3-inch, PAL D/N, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/3-9 mm F1.4 Varifocal lens, white, surface mount, French
Order number **VDN-495V03-10SF**

VDN-495V03-20 Vandal Resistant Day/Night Model
1/3-inch, NTSC D/N, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3-9 mm F1.4 Varifocal lens, white
Order number **VDN-495V03-20**

VDN-495V03-20S Vandal Resistant Day/Night Model, Surface Mount
1/3-inch, NTSC D/N, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/3-9 mm F1.4 Varifocal lens, white, surface mount
Order number **VDN-495V03-20S**

VDN-495V09-10 Vandal Resistant Day/Night Model
1/3-inch, PAL D/N, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/9-22 mm F1.4 Varifocal lens, white
Order number **VDN-495V09-10**

VDN-495V09-20 Vandal Resistant Day/Night Model
1/3-inch, NTSC D/N, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/9-22 mm F1.4 Varifocal lens, white
Order number **VDN-495V09-20**

VDN-495V09-10S Vandal Resistant Day/Night Model
1/3-inch, PAL D/N, 540 TVL, 12 VDC/24 VAC, 50 Hz, w/9-22 mm F1.4 Varifocal lens, white, surface mount.
Order number **VDN-495V09-10S**

VDN-495V09-20S Vandal Resistant Day/Night Model
1/3-inch, NTSC D/N, 540 TVL, 12 VDC/24 VAC, 60 Hz, w/9-22 mm F1.4 Varifocal lens, white, surface mount.
Order number **VDN-495V09-20S**

VDA-455UTP
Adaptor for UTP twisted pair output
Order number **VDA-455UTP**

S1460 Service/Monitor Cable
2.5 mm connector to BNC for analog and IP cameras, 1 m
Order number **S1460**

UPA-1509-60 Power Supply
120 VAC, 60 Hz, 15 VDC, 9 VA Out
Order number **UPA-1509-60**

UPA-1509-50 Power Supply
220 VAC, 50 Hz, 15 VDC, 9 VA Out
Order number **UPA-1509-50**

UPA-2420-50 Power Supply
220 VAC, 50 Hz, 24 VAC, 20 VA Out
Order number **UPA-2420-50**

UPA-2450-50 Power Supply, 220 V, 50 Hz
Indoor, 220 VAC, 50 Hz In; 24 VAC, 50 VA Out
Order number **UPA-2450-50**

Accessories

VDA-455SMB
Surface mount box, high impact
for VDM-345, VDC-445, VDM-355, VDC-455, VDC-485
and VDN-495 (not for FlexiDome VF).
Order number **VDA-455SMB**

VDA-455TBL Tinted bubble
Tinted bubble for FlexiDome series
Order number **VDA-455TBL**

VDA-455CBL Clear bubble
Clear Bubble for FlexiDome series
Order number **VDA-455CBL**

VDA-WMT-DOME Wall Pendant Mount Bracket
Wall pendant mount bracket for FlexiDome cameras
Order number **VDA-WMT-DOME**

VDA-CMT-DOME Corner Mount Bracket
Corner mount bracket for FlexiDome cameras
Order number **VDA-CMT-DOME**

VDA-PMT-DOME Pendant Pipe Mount Bracket
Pendant pipe mount bracket for FlexiDome cameras
Order number **VDA-PMT-DOME**

Software Options

VP-CFGSFT Configuration Software
for cameras using Bilinx, includes VP-USB Adaptor
Order number **VP-CFGSFT**